

Application No. 10/089,841
Amendment Dated 5/4/2006
Reply to Final Rejection of January 4, 2006

REMARKS/ARGUMENTS

Claims 17-24 and 27-33 are pending.

Favorable reconsideration is respectfully requested in view of the following remarks.

Premature Finality

The pending Office Action was made final on the stated basis that “Applicant’s amendment necessitated the new ground(s) of rejection.” This assertion lacks any basis in fact, and is inconsistent with other statements made in the Office Action.

The prior amendment which allegedly necessitated the new grounds of rejection consisted of incorporating the limitations of claims 25 and 26 into base claim 17, and further limiting claim 17 to specify that adhesion of the flexible compartment layer to the base and the cover to the flexible compartment layer is automatic. The incorporation of the limitations of claims 25 and 26 (which depended from claim 25, which in turn depended from claim 17) into claim 17 was not an amendment necessitating the new grounds of rejection. In essence, claim 26 was simply rewritten in independent form as amended claim 17. To the extent that the rejection was necessitated by the limitations of amended claim 17, the necessity previously existed in the application in the form of claim 26.

With respect to the “automatic” limitation also added to claim 17, the Examiner acknowledges in the Office Action at paragraph 6:

The Examiner respectfully disagrees with Applicant’s assertion that Brigati does not teach an automatically adhering layer – but this point is moot in light of the current amended claim since Brigati does not disclose a cover.

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In other words, the “automatic” limitation was considered by the Examiner to be irrelevant and did not therefore necessitate the new grounds of rejection. Pursuant to MPEP 706.07(a), a second action on the merits should not be final where “the examiner introduces a new ground of rejection that is neither necessitated by applicant's amendment of the claims nor based on information submitted in an information disclosure statement.”

Accordingly, reconsideration and withdrawal of the finality of the Office Action are respectfully requested.

Rejections under 35 U.S.C. § 103(a)

Claims 17-20, 22-24 and 29-33 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent No. 4,299,920 to Peters in view of U.S. Patent No. 4,441,793 to Elkins. This rejection is respectfully traversed.

The object of the present invention, as described on page 4, paragraph 3 of the specification, is to provide an improved reaction substrate with which the disadvantages of conventional reaction substrates can be avoided and which in particular has a simple structure, is inert under the interesting reaction conditions and is also simple to manufacture with any structures and easy to handle. The new reaction substrate should in particular also be reusable several times or recyclable. These objects are solved in particular by a reaction substrate having the characteristics of amended claim 17.

Peters describes a receptacle for cell cultures or biological tests comprising a base plate (3) and a wall member (1) to form probe chambers (2) joined in detachable and liquid-tight manner to the base plate by adhesion. After being filled with the suspension of cells to be

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cultivated, a cover for the chambers (2) is optionally provided. It may fit loosely and be provided with vent studs and an overlapping edge, or it may be held to the wall section by adhesion and thus close the chambers (2) in the same way that the base plate (3) is closed on its underside (see column 3, lines 36 to 47). A cover with penetration openings for supplying samples to the chambers or for removing samples from the chambers is not shown.

The Examiner proposes to remedy these deficiencies of the primary reference, Peters, by modifying the teachings of Peters with the teachings of Elkins.

Elkins describes an evaluation slide with a permanently fixed cover sheet to the side walls and openings passing into the viewing area. The applied liquid is drawn via the openings into the viewing area between base layer and cover layer by capillary action (see column 2, lines 43-44), wherein the base layer and the cover layer are held to a desired predetermined thickness to provide capillary flow (see column 2, lines 53-64). To achieve the predetermined thickness, it is necessary to permanently affix the layers into a unitary slide in a way that makes the separation and reuse of the layers impossible (see column 3, lines 38-41).

Moreover, the cover layer of Elkins has smaller openings compared to the wall layer to assure the capillary flow to fill the sample reservoirs and to assist in the escape of air as the liquid is being introduced (see column 3, lines 24-26). Removing the samples via the same openings in the cover is not possible due to the same capillary forces.

The proposed combination of reference teachings fails to meet all the features of the claimed invention. Combining the permanently affixed cover layer of Elkins with the receptacle of Peters still leads to an evaluation slide as described by Elkins, which is missing the claimed

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automatic adhesion of the cover, making the reuse of the separable wall and cover member impossible. Furthermore, the cover layer of Elkins has smaller openings compared to the wall layer, which enable the use of capillary action to fill samples into the slide and to assist in the escape of air. The same capillary action would make the removal of samples from the reservoirs impossible in the proposed combination of the cover layer of Elkins and the receptacle of Peters.

Accordingly, reconsideration and withdrawal of the obviousness rejection over Peters in view of Elkins are respectfully requested.

Claim 21 stands rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Peters in view of Elkins and further in view of U.S. Patent No. 6,645,434 to Muramatsu. This rejection is respectfully traversed.

Muramatsu is cited solely for the purpose of remedying the admitted failure of Peters and Elkins to teach a base thickness of 150 microns.

Regardless of whether such a teaching exists in Muramatsu and can be properly combined with the teachings of the other two references, the proposed combination of reference teachings still fails to meet all the features of the claimed invention for at least the reasons noted above with respect to the rejection of base claim 17.

Muramatsu discloses a common cover glass with a thickness of nearly 0.17 mm (see column 2, lines 58-59). The thickness of such a standard cover glass is known to a person skilled in microscope techniques. However, it is not obvious to transfer this to a cover layer with penetration openings for supplying and removing samples, as in the present invention. A person

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of ordinary skill in the art would not even have been motivated to combine a standard cover glass with the reaction substrate of the present invention.

Accordingly, reconsideration and withdrawal of the obviousness rejection over Peters in view of Elkins and Muramatsu are respectfully requested.

Claims 27 and 28 stand rejected under 35 U.S.C. § 103(a) as allegedly being obvious over Peters in view of Elkins and further in view of U.S. Patent No. 6,037,168 to Brown. This rejection is respectfully traversed.

Brown is cited solely for the purpose of remedying the admitted failure of Peters and Elkins to teach channels, storage pots, fluid lines, electrodes and/or sensors.

Regardless of whether such a teaching exists in Brown and can be properly combined with the teachings of the other two references, the proposed combination of reference teachings still fails to meet all the features of the claimed invention for at least the reasons noted above with respect to the rejection of base claim 17.

Accordingly, reconsideration and withdrawal of the obviousness rejection over Peters in view of Elkins and Brown are respectfully requested.

For at least the reasons set forth above, it is respectfully submitted that the above-identified application is in condition for allowance. Favorable reconsideration and prompt allowance of the claims are respectfully requested.

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Should the Examiner believe that anything further is desirable in order to place the application in even better condition for allowance, the Examiner is invited to contact Applicants' undersigned attorney at the telephone number listed below.

Respectfully submitted,

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